

Using Domes on Digital Sprite Multiplexers

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Pelco

The DSL/DS generates Pelco Extended Coaxitron Protocol but does not support the following: -

- Random Scan function
- Auto Scan function

These functions are only available via a Pelco controller.

Features available to DS/DSL using Pelco coaxial.

Variable speed Pan/Tilt

Zoom/Focus

32 Presets (00 to 31)

Auto 180° Flip

Goto 0 Degree position.

Presets

Recall Presets by pressing the **<Preset>** button. Once a box appears on screen that displays:
Goto Preset. Enter Preset number.

Type in the Preset number by using cameras 1 - 10. Camera 10 being 0.

Save Presets by pressing and holding the **<Preset>** button. Once a box appears on screen that displays:

Save Preset. Enter Preset number.

Type in the Preset number by using cameras 1 - 10. Camera 10 being 0.

Cancel Presets by double pressing the **<Preset>** button. Once a box appears on screen that displays:

Clear Preset. Enter Preset number.

Type in the Preset number by using cameras 1 - 10. Camera 10 being 0.

Pelco Commands obtained directly by using the Preset command

Preset Number	Function
32	Auto 180° Flip.
33	Goto 0 Degree position.

In order to retrieve further features you will need to use a BBV RX100 Protocol converter.

Further features using a BBV RX100.

RX100 Features using a DS/DSL:

Variable speed Pan/Tilt

Zoom/Focus, Autofocus

16 Presets

2 Preset patrols

4 alarm inputs driving to preset 1 -4

Dome Pattern definition and playback

Display Dome Menu (Preset 95) *889 002.

Enter within menu *889 003

Pattern define start *889 004

Pattern define stop *889 005

Our Patrol key recalls Patrol 1.

Our Autopan key starts Pattern 1.

Ultrak Diamond KD6 Dome Direct by RS485

The Ultrak dome needs to be set to *Maxpro Emulation*.
See Table 1. For correct switch settings.

You have full access to the dome menu and functions by the DS/DSL. The only function that is not possible to use is the privacy zones and iris open/close of the camera (Not in menu option). Also Preset (Preshot) names aren't available.

Dome features via DS/DSL:

Variable speed Pan/Tilt.

Zoom/Focus, Autofocus, Auto exposure, Backlight compensation.

460TVL 1.7 lux (0.15 with slow shutter).

72x zoom 4.1-73.8mm (18:1) optical zoom.

4x digital zoom.

400 deg/sec pan 200 deg/sec tilt.

80 Presets/Preshots (Preset 00 to Preset 79).

3 PTZ Tours (1 - 3) Has the ability to store manual PTZ movement.

4 Patrols (VectorScan 0 - 3).

Still shot on Preset (Freezes camera picture when travelling to a Preset).

Auto Pivot.

Built in dome menu for programming and setup.

4 alarm inputs with the ability to recall a Preset (Preshot), Patrol (Vectorscan) or PTZ Tour.

Accessing the dome menu

See Figure 1 for the Domes Menu Screen.

In order to access the domes Menu using the DS/DSL press the **<* Command>** button. A key assistance box appears which says which keys are used to navigate the following dome menu, press **<Menu>** to continue.

** Is displayed next to the time and date (on screen) to indicate that the keyboard is controlling the dome menu.*

To navigate around the domes menu use the DS/DSL keyboards joystick to move the cursor around.

Press the **<Enter>** key to select a menu item/entry (also is **IRIS OPEN** key, within the menu).

Press the **<* Command>** key to exit a menu item/page (also is **IRIS CLOSE** key, within the menu).

To exit out of the Domes menu goto the Domes first page then Press the **<* Command>** button.

The * will still appear at the bottom of the DS/DSL main monitor. Press and hold down the **<* Command>** button to switch dome menu control off (* disappears).

Autopan & Patrol button functions

Pressing the **<Autopan>** button runs PTZ Tour 1.

Pressing the **<Patrol>** button runs Vectorscan 0.

Presets

Recall Presets by pressing the **<Preset>** button. Once a box appears on screen that displays:
Goto Preset. Enter Preset number.

Type in the Preset number by using cameras 1 - 10. Camera 10 being 0.

Save Presets by pressing and holding the **<Preset>** button. Once a box appears on screen that displays:

Save Preset. Enter Preset number.

Type in the Preset number by using cameras 1 - 10. Camera 10 being 0.

Cancel Presets by double pressing the **<Preset>** button. Once a box appears on screen that displays:

Clear Preset. Enter Preset number.

Type in the Preset number by using cameras 1 - 10. Camera 10 being 0.

Ultrak Commands obtained directly by using the Preset command.

Recall preset by pressing the goto **<Preset>** button. Once a box appears on screen that displays:
Goto Preset. Enter Preset number.

Type in the Preset number by using cameras 1 - 10. Camera 10 being 0.

E.g. For preset 1 press **<preset>** button then press **<Camera 10>** (0) then **<Camera 1>**.

If inputting single figure presets you can press the preset number then the **<Enter>** key.

E.g. For preset 1 press **<preset>** button then press the **<Camera 1>** then the **<Enter>** key.

Preset Number	Function
80	Run PTZ Tour 1
81	Run PTZ Tour 2
82	Run PTZ Tour 3
83	Program PTZ Tour 1
84	Program PTZ Tour 2
85	Program PTZ Tour 3
86	Terminate PTZ Tour Programming
87	Run Patrol 1 (VectorScan 1)
88	Run Patrol 2 (VectorScan 2)
89	Run Patrol 3 (VectorScan 3)
90	Start Menu (Same as <* command> key)
91	Toggles the error table display ON/OFF
92	Toggles auto Exposure ON/OFF. The Factory default is on.
93	Toggles Backlight Compensation ON/OFF The unit must be in auto exposure mode for backlight compensation to function.
94	<i>Toggles between standard operation and nightshot mode. (model CA470S4N, CA470S4P, CA480S4N, and CA480S4P cameras only).</i>
95	Decrease Goto Preset speed
96	Increase Goto Preset speed
95	<i>(Not implemented) Toggles between freeze and unfreeze video</i>
96	<i>(Not implemented) Invokes the Flashback Function</i>

Preset 94 hasn't been tested. Presets 95 & 96 have been reassigned to Increase & Decrease Goto Preset Speed.

Table 1

Ultrak KD6 Switch settings

*** Please refer to Ultrak Documentation for latest switch settings ***

R Firmware M Firmware 1 st August 2001 L Firmware 25 th April 2001 K Firmware 24 th January 2001				
Control System	S4-1	S4-2	S4-3	S4-4
<i>Maxpro</i>	<i>Closed</i>	<i>Open</i>	<i>Open</i>	<i>Open</i>

J Firmware 24 th October 2000				
Control System	S4-1	S4-2	S4-3	S4-4
<i>Maxpro</i>	<i>Closed</i>	<i>Open</i>	<i>Open</i>	<i>Open</i>

H Firmware 14 th August 2000				
Control System	S4-1	S4-2	S4-3	S4-4
<i>Maxpro</i>	<i>Open</i>	<i>Closed</i>	<i>Open</i>	<i>Open</i>

** Using a DSL with Ultrak Drivers version 1.1 has problems entering and exiting the dome menu (Rev H firmware only). This is due to a slight change in the Ultrak protocol. In order to rectify the problem the Ultrak Drivers will need to be upgraded in the DSL. This problem doesn't effect the DS, as it has version 1.2 or above, drivers installed. Please contact DM technical support for the latest DSL Ftp Telemetry Drivers software. See appendix at the end of the document for the procedure to obtain the DSL Telemetry Driver version. **

G Firmware 26 th May 2000				
Control System	S4-1	S4-2	S4-3	S4-4
<i>Maxpro</i>	<i>Closed</i>	<i>Open</i>	<i>Open</i>	<i>Closed</i>

***NOTE:** When you initially power up the dome an information screen will appear describing the protocol it has been set to.

Figure 1

Ultrak Dome Menu screen

---- UltraDome KD6 ----
518 584-2980 RevH

1 Language.....English
2 Display Options
3 Control Options
4 Diagnostic Options
5 Camera Options
6 Function Programming
IRIS CLOSE to Exit

VCL Orbiter and Jupiter Microsphere Domes Direct by RS485

The dome doesn't have any in-built menus so the DSL/DS generates 3 different menus.

Dome features via DS/DSL:

Variable speed Pan/Tilt/Zoom up to 400°/second (Orbiter) with variable speed zoom lens.

Zoom/Focus, Autofocus, Auto iris, Auto Mono/Colour, Auto IR, Auto 180° tilt.

Mono, Colour and Colour/mono options.

Low light capability, 0.4 lux Colour mono with full frame intergration.

2 programmable tours (Autopan and Patrol)

100 fully programmable presets (64 for Jupiter).

Accessing the menus

In order to access the Menu using the DS/DSL press the **<* Command>** button.

** Is displayed next to the time and date (on screen) to indicate that the keyboard is in the dome menu.*

To navigate around the menu use the DS/DSL keyboards joystick to move the cursor around.

Press **<Menu>** to move onto the next screen.

Press and hold down **<Menu>** to exit the telemetry dome menu.

Menu 1

VCL Options		
Auto Iris	On/Off	
Auto Focus	On/Off	
Auto Mono/Col	On/Off	
Toggle Mono/Col	---/Toggle	
Auto IR	On/Off	
Auto 180 tilt	On/Off	
Patrol Return	---/001-999	

Toggles the Auto Iris function on the camera on or off.

Toggles the Auto Focus function on the camera on or off.

Automatically change the camera to mono in low light conditions.

Manually toggle Mono / Colour camera operation. (Disables 'Auto Mono/Col' option).*

Toggle the infrared Filter On or Off for Black and White Night-time operation. *

When tilting down automatically turn 180° to keep the correct orientation.

Automatically return to patrol after an alarm preset, after 001-999 seconds.

* Dome / camera dependable.

Patrol Return is available on Digital Sprite only.

Menu 2

VCL Patrol Data			
	Preset	Speed	Dwell
>	--	00	001
>	--	00	001
>	--	00	001
>	--	00	001
>	--	00	001
>	--	00	001
>	--	00	001
>	--	00	001
>	--	00	001
>	--	00	001

When you press the **<Patrol>** key recall the presets contained within this table. Up to 16 Presets can be used.

Preset (00 - 99)

Recall preset number.

Speed (00 -99)

Speed of travel between presets (00 slow - 99 fast).

Dwell (001 - 240)

Time taken (In Seconds) before moving on to the next preset in the list (Nearest 2 seconds used by head).

Menu 3

VCL Autopan Data			
	Preset	Speed	Dwell
>	--	00	001
>	--	00	001
>	--	00	001
>	--	00	001
>	--	00	001
>	--	00	001
>	--	00	001
>	--	00	001
>	--	00	001
>	--	00	001
>	--	00	001
>	--	00	001

When you press the **<Autopan>** key recall the presets contained within this table. Up to 16 Presets can be used.

Preset (00 - 99)

Recall preset number.

Speed (00 -99)

Speed of travel between presets. (00 slow - 99 fast)

Dwell (001 - 240)

Time taken (In Seconds) before moving on to the next Preset in the list (Nearest 2 seconds used by head).

Autopan & Patrol button functions

Pressing the **<Autopan>** button runs the Presets contained within **Menu 3: VCL Autopan Data**.

Pressing the **<Patrol>** button runs the Presets contained within **Menu 2: VCL Patrol Data**.

Presets

Recall Presets by pressing the **<Preset>** button. Once a box appears on screen that displays:

Goto Preset. Enter Preset number.

Type in the Preset number by using cameras 1 - 10. Camera 10 being 0.

Save Presets by pressing and holding the **<Preset>** button. Once a box appears on screen that displays:

Save Preset. Enter Preset number.

Type in the Preset number by using cameras 1 - 10. Camera 10 being 0.

Cancel Presets by double pressing the **<Preset>** button. Once a box appears on screen that displays:

Clear Preset. Enter Preset number.

Type in the Preset number by using cameras 1 - 10. Camera 10 being 0.

JVC TK-C675 or TKC-C553E Dome Direct by RS485

If using a TK-C675 model there are two types of JVC telemetry protocol, Type 1 and Type 2, which must be selected in the Alarms and Presets menu. Default is Type 2.

Type 1	Type 2
TK-C675E	TK-C675BE
TK-C675U	TK-C675BU
--	TK-C553E

Dome features via DS/DSL:

JVC TK-C675

1/3 inch 480 TVL Colour CCD Camera, 24V AC
Digital Signal Processor
64 Preset positions (Preset 00 - 63)
360 degree endless panning
Sensitivity 0.9 lux at f1.2 (wide)
Easy Auto Focus during manual operation
16x zoom 4.5 to 72mm
Horizontal Resolution: 480 TV Lines
Minimum required Illumination: 0.9 Lux (f1.2, AGC on)
Video Output: Composite Video signal 1.0 V(p-p) 75 Ohms
Video S/N: 48 dB (AGC off)
Back Light Compensation: 4 Patterns
White Balance: ATW/Manual
Zoom Ratio: 16:1, 4.5-75mm
Zoom Speed: Approx. 2 seconds
Focus Speed: Approx. 1 sec
Panning: 360-deg endless, 240 deg per sec
Tilting: 120 deg / sec plus auto flip 180 deg

TKC-C553E

Varifocal Zoom Lens 2.6-6mm
Digital 2 x Zoom with selectable Pan & Tilt Modes
Compact Design 112mm Dia x 113mm
4 Lux
Image Device: 1/4" IT CCD Pickup Element: Interline-Transfer CCD Effective Picture Elements:
752H x 582V 440,000 pixels
Sync System: LL / Internal
Horizontal Resolution: 470 TVL
Minimum required Illumination: 4 Lux with Cover ON
Video Output: Composite Video Signal 1.0V (p-p) 75 Ohms
Video S/N: 50 dB
Back Light Compensation: Selectable BLC Modes
White Balance: Full Auto White Balance
Zoom Ratio: 2.6mm - 6mm + 2 x Digital
Zoom Speed: Digital only (Default Zoom Speed 1)
Focus Speed: N/A
Panning: Digital only
Tilting: Digital only

The Domes Internal Switch settings should be as follows:

Disp on
Multi-drop on
Simplex on
Sync Int

Machine ID set the camera number 1- 16

Using a TK-C675E (U)

If using the earlier TK-C675E (U) then this doesn't have any internal menus. In order to change any settings you will need to use the goto Preset command.

JVC Commands obtained directly by using the Preset command.

Recall Preset by pressing the goto **<Preset>** button. Once a box appears on screen that displays *Goto Preset. Enter Preset number.*

Type in the Preset number by using cameras 1 - 10. Camera 10 being 0.

Preset Number	Function
64	Change Shutter Speed. Cycles through the different speed. 1/50 (1/60), 1/60 (1/100), 1/1000, 1/2000, 1/4000, 1/10000
65	Change Backlight compensation. Cycles through different options. BLC OFF, BLC MODE AREA 1, BLC MODE AREA 2, BLC MODE AREA 3, BLC MODE AREA 4.
66	Increase Zoom Speed, cycles through speeds 0, 1, 2, 3.
67	Increase Focus Speed, cycles through speeds 0, 1, 2, 3.

Pressing the **<Autopan>** button runs Autopan

Using a TK-C675BE(BU)

Using the later model this has a in built dome menus.

Accessing the dome menu

In order to access the domes Menu using the DS/DSL press the **<* Command>** button. A key assistance box appears which says which keys are used to navigate the following dome menu, press **<Menu>** to continue.

** Is displayed next to the time and date (on screen) to indicate that the keyboard is controlling the dome menu.*

To navigate around the dome menu use the DS/DSL keyboards joystick to move the cursor around.

Press the **<Enter>** key to select a menu item.

Press the **<* Command>** key to exit a menu item/page.

To exit out of the Domes menu goto the Domes first page then Press and hold down the **<* Command>** button to switch dome menu control off (* disappears).

When the first page of the domes menu is on screen each time you press the **<* Command>** button the domes menu display will toggle *on* or *off*. Make sure before you hold down the **<* Command>** Button to exit out of the menu that the domes menu is on screen.

If you don't, when you exit, the dome menu will reappear on screen but you will have exited out of dome menu control..

Autopan & Patrol button functions

Pressing the **<Autopan>** button runs Autopan function as defined in the JVC Dome menu.

Pressing the **<Patrol>** runs Preset Sequence as defined in the JVC Dome Menu.

Presets

Recall Presets by pressing the **<Preset>** button. Once a box appears on screen that displays: *Goto Preset. Enter Preset number.*

Type in the Preset number by using cameras 1 - 10. Camera 10 being 0.

Save Presets by pressing and holding the **<Preset>** button. Once a box appears on screen that displays:

Save Preset. Enter Preset number.

Type in the Preset number by using cameras 1 - 10. Camera 10 being 0.

Cancel Presets by double pressing the **<Preset>** button. Once a box appears on screen that displays:

Clear Preset. Enter Preset number.

Type in the Preset number by using cameras 1 - 10. Camera 10 being 0.

JVC Commands obtained directly by using the Preset command.

Recall Preset by pressing the goto **<Preset>** button. Once a box appears on screen that displays *Goto Preset. Enter Preset number.*

Type in the Preset number by using cameras 1 - 10. Camera 10 being 0.

Preset Number	Function
66	Increase Zoom Speed, cycles through speeds 0, 1, 2, 3.
67	Increase Focus Speed, cycles through speeds 0, 1, 2, 3.

JVC Dome Menu

SETUP
> POSITION SETUP . .
CAMERA . .
CONTROL UNIT . .

> is the item cursor.
. . Submenu to be followed.

See the JVC documentation for further menu details.

Dennard 2050 Dome Direct by RS485

This has its own Dome menu that can be accessed by the DS/DSL.

Dome features via DS/DSL:

Variable speed Pan/Tilt.

Zoom/Focus, Autofocus.

18 x 1 zoom lens, 4.1mm to 73.8mm zoom; F1.4 to F3.0.

Autofocus with manual override.

768 horizontal x 494 vertical, pixels. More than 470 TVL..

0.05° to 300° / second max (both Pan and Tilt).

180° Auto Flip. At 90° tilt down.

Up to 90 Preset positions with programmable titles. 90 (00 - 89)...?? (additional presets can be programmed using dome's menu)

32 programmable sectors (pan only).

Accessing the dome menu

In order to access the domes Menu using the DS/DSL press the **<* Command>** button. A key assistance box appears which says which keys are used to navigate the following dome menu, press **<Menu>** to continue.

** Is displayed next to the time and date (on screen) to indicate that the keyboard is controlling the dome menu.*

To navigate around the domes menu use the DS/DSL keyboards joystick to move the cursor around.

Press the **<Enter>** key to select a menu item.

Press the **<* Command>** key to exit a menu item/page.

To exit out of the Domes menu goto the Domes first page then Press and hold down the **<* Command>** button to switch dome menu control off (* disappears).

Autopan & Patrol button functions

Pressing the **<Autopan>** button runs Queue 1.

Pressing the **<Patrol>** button runs Sequence 1.

Presets

Recall Presets by pressing the **<Preset>** button. Once a box appears on screen that displays: *Goto Preset. Enter Preset number.*

Type in the Preset number by using cameras 1 - 10. Camera 10 being 0.

Save Presets by pressing and holding the **<Preset>** button. Once a box appears on screen that displays:

Save Preset. Enter Preset number.

Type in the Preset number by using cameras 1 - 10. Camera 10 being 0.

Note: When saving a *Preset* on the Dennard it is possible for the *Naming Preset* screen to appear (Option within the Dennard Menu, Default is on).

Use the DS/DSL keyboards joystick to move the cursor around.

To select a entry use the **<Enter>** key.

Once you have finished naming the *Preset* move the cursor to *ACCEPT*, *EDIT* or *CANCEL* at the bottom of the screen then use the **<Enter>** key.

Cancel Presets by double pressing the **<Preset>** button. Once a box appears on screen that displays:

Clear Preset. Enter Preset number.

Type in the Preset number by using cameras 1 - 10. Camera 10 being 0.

Dennard Commands obtained directly by using the Clear Preset command.

Cancel Presets by double pressing the **<Preset>** button. Once a box appears on screen that displays:

Clear Preset. Enter Preset number.

Type in the Preset number by using cameras 1 - 10. Camera 10 being 0.

Clear Preset Number	Function
90	Increment Zoom speed by 1 (5 steps Default 3)
91	Decrement Zoom speed by 1
92	Increment Focus speed by 1 (5 steps Default 1)
93	Decrement Focus speed by 1

Dennard 2050 Dome by BBV Coaxial Telemetry

If using a 2050 by BBV Coaxial telemetry then the Dennard uses a BBV RX100 interface unit.

Dome features via DS/DSL:

Automatic return to preset or tour mode.

18 x 1 zoom lens, 4.1mm to 73.8mm zoom; F1.4 to F3.0.

Autofocus with manual override.

0.05° to 300° / second max (both Pan and Tilt).

180° Auto Flip. At 90° tilt down.

Up to 16 Preset positions with programmable titles (additional presets can be programmed using dome's menu)

32 programmable sectors (pan only).

Accessing the dome menu

In order to access the domes menus you need to type in * commands.

Advanced Features	Telemetry Command	Menu Password
Dome User Menu	*889 002	----
Dome Supervisor Menu	*889 003	1111
Dome Service/Technician Menu	*889 004	9999

Use <*> and the camera buttons (Camera 1 to 10) on the keyboard to enter the commands.

To navigate around the domes menu use the DS/DSL keyboards joystick to move the cursor around. To select a menu item/entry use the *goto Preset 1* command.

Press the <Preset> button. Once a box appears on screen that displays:

Goto Preset. Enter Preset number.

Press <CAM1> then the <Enter> button.

Presets

Recall Presets by pressing the <Preset> button. Once a box appears on screen that displays:

Goto Preset. Enter Preset number.

Type in the Preset number by using cameras 1 - 10. Camera 10 being 0.

Save Presets by pressing and holding the <Preset> button. Once a box appears on screen that displays:

Save Preset. Enter Preset number.

Type in the Preset number by using cameras 1 - 10. Camera 10 being 0.

Note: When saving a *Preset* on the Dennard it is possible for the *Naming Preset* screen to appear (Option within the Dennard Menu, Default is on).

Use the DS/DSL keyboards joystick to move the cursor around.

To select a menu item or entry use the *goto Preset 1* command.

Press the <Preset> button. Once a box appears on screen that displays:

Goto Preset. Enter Preset number.

Press <CAM1> then the <Enter> button.

Once you have finished naming the *Preset* move the cursor to *ACCEPT*, *EDIT* or *CANCEL* at the bottom of the screen then use the *goto Preset 1* command.

Press the <Preset> button. Once a box appears on screen that displays:

Goto Preset. Enter Preset number.

Press <CAM1> then the <Enter> button.

Cancel Presets by double pressing the <Preset> button. Once a box appears on screen that displays:

Clear Preset. Enter Preset number.

Type in the Preset number by using cameras 1 - 10. Camera 10 being 0.

Autopan & Patrol button functions

Pressing the <Autopan> button runs the domes internal Sequence 001.

Pressing the <Patrol> button runs Patrol 1.

Panasonic WV-CS850 / WV-CS854

This has its own Dome menu that can be accessed by the DS with Application software 2.0 (015) or above.

Dome features via DS/DSL:

Variable P/T/Z

Full menu operation.

64 presets.

Home position (uses one preset)

1/4-type Super Dynamic II CCD

480 line colour imaging

Automatic / Manual Iris

Electronic Shutter

360° endless panning range

RS485 Control

Patrol & Autopan

See the Panasonic Data Sheet for more details

Dome Connection

Connection from the Digital Sprite is from the Serial 9 way D- type Female to the Panasonic RS485 Data Port (RJ11 Connector).

Digital Sprite - 9 Way D-Type Female		Panasonic RS485 Data Port - 6 way MMJ		
1	Data A +	Data Reception	Green	R (A)
9	Data B -		Yellow	R (B)
		Data Transmission	Not Used	
		GND		

Dome Setup*

Protocol Selection	Panasonic's conventional.
RS485 Setting	Full Duplex (4 line).
Parameter Selection	19200 Baud Rate, 8 Data Bit, Parity Check None, Stop Bit 1.
Unit Number	1 to 16. Must be relative to Camera Number on Digital Sprite. *

* Please refer to the Panasonic Documentation on exact switch settings.

Accessing the dome menu

In order to access the domes Menu using the DS press the **<* Command>** button. A key assistance box appears which says which keys are used to navigate the following dome menu, press **<Menu>** to continue.

** Is displayed next to the time and date (on screen) to indicate that the keyboard is controlling the dome menu.*

To navigate around the domes menu use the DS keyboards joystick (↑, ↓) to move the cursor from Line to Line.

Move the Joystick (←, →) to change the value.

Press the **<Enter>** key to select a menu item. Panasonic's CAM (SET) key.

Press the **<* Command>** key to exit a menu item/page.

To exit out of the Domes menu goto the Domes first page then Press and hold down the **<* Command>** button to switch dome menu control off (* disappears).

Dome Menu

**** SET UP MENU ****

PRESET 1* ↗

MAP ↗

HOME POSITION **1**

SELF RETURN **OFF**

AUTO MODE **OFF**

AUTO PAN KEY **AUTO PAN**

DIGITAL FLIP **ON**

LOCAL/REMOTE **LOCAL**

SPECIAL1 ↗

CAMERA ↗

RS485 SET UP ↗

↗ Indicates there is a submenu.

Direct Key Presses:

<i>Panasonic Key/Function</i>	<i>Digital Sprite Keyboard press</i>
<F2> Open Special 2 (In Dome Menu)	<Camera 3>
<F3> All Reset (In Dome Menu)	<Camera 4>
CAM (SET) Enter Setting / Open a submenu	<Enter>
Close a submenu / ESC	Press <* Command>
Open CAM SETUP (Enter Dome Setup)	Press <*Command> then Press <Menu>
Close CAM SETUP (Exit Dome Setup)	Press and hold <*Command>
Move the Cursor	Joystick (←,↑,↓,→)
Select a parameter	Joystick (←,→)
Adjust the level	Joystick (←,→)
Focus near	<focus near>
Focus far	<focus far>
Ones shot focus	Press <focus near> <focus far> together
Zoom in	<Zoom +>
Zoom out	<Zoom ->
Manual Iris	Press <Zoom +> <Zoom -> together, then press <Zoom +> for Iris Open, <Zoom -> for Iris close. Move Joystick (←,↑,↓,→) to return keys to normal <Zoom +> <Zoom -> function.
Auto key / Autopan	<auto-pan> , runs either the SEQUENCE, SORT, PATROL PLAY or AUTO PAN. Set by Panasonic menu.
Patrol	<patrol> , recalls the PATROL.
Close Aux. 1 output	<Wash> , momentary close
Close Aux. 2 output	<Wiper> , latching ON/OFF

Presets

Recall Presets by pressing the **<Preset>** button. Once a box appears on screen that displays: *Goto Preset. Enter Preset number.*

Type in the Preset number by using cameras 1 - 10. Camera 10 being 0.

Saving a preset is done by entering the Panasonic's OSD Menu.

Move the dome to the position where you want to store the preset.

In order to access the domes Menu using the DS press the **<* Command>** button. A key assistance box appears which says which keys are used to navigate the following dome menu, press **<Menu>** to continue.

** Is displayed next to the time and date (on screen) to indicate that the keyboard is controlling the dome menu.*

**** SET UP MENU ****

PRESET 1*

MAP 

HOME POSITION 1

SELF RETURN OFF

AUTO MODE OFF

AUTO PAN KEY AUTO PAN




DIGITAL FLIP ON

LOCAL/REMOTE LOCAL

SPECIAL1 

CAMERA 

RS485 SET UP 

With the cursor highlighting the **PRESET 1*** select the Preset you want to store by using the Joystick (, ). The * mark means the position number is preset.

Press **<Enter>** to select the preset.

Now the screen changes to..

PRESET NO. 2

POSITION SET



PRESET ID ON 

ALC/MANUAL MANUAL 

DWELL TIME 3S






SCENE FILE OFF

PRESET SPEEDI

L H

RET DEL

To change any parameters on this screen..

Use the Joystick (, ) to move the cursor from line to line. Use Joystick (, ) to change any parameters or **<Enter>** to select the sub menu ().

See Panasonic documentation for further information.

Once you have changed the parameters move the cursor to
PRESET NO. 2

POSITION SET



Press <Enter> on the DS keyboard you will see a new screen.

```
      ** POSITION 2 **
PAN/TILT      →PUSH SET
ZOOM/FOCUS    →PUSH SET
```

PAN OFFSET SET ← + 0.0 →

RET

2

Use the joystick (←,↑,↓,→) to move the cursor around the menu.

Highlight PAN/ TILT →PUSH SET then press <Enter>. The screen will change to..

```
      ** POSITION 2 **
PAN/TILT      →PUSH SET
ZOOM/FOCUS    →PUSH SET
```

U TILT D / L PAN R

PAN OFFSET SET ← + 0.0 →

RET

2

Press <Enter> again to set the pan and tilt axis.

Move the cursor down to ZOOM/FOCUS

→PUSH SET

Press <Enter>. The screen will change to..

```
      ** POSITION 2 **
PAN/TILT      →PUSH SET
ZOOM/FOCUS    →PUSH SET
```

U ZOOM D / L FOCUS R

PAN OFFSET SET ← + 0.0 →

RET

2

Press <Enter> again to set the zoom and focus axis.

Once the Preset has been stored either Press and Hold down the <* Command> button or use the RET option to return back through the menus.

For further information please refer to the Panasonic documentation.

**** If a preset is already stored in a position then you will need to delete the preset before you can store a new preset in the same position ****

Deleting a Preset is done by entering the Panasonic's OSD Menu.

In order to access the domes Menu using the DS press the **<* Command>** button. A key assistance box appears which says which keys are used to navigate the following dome menu, press **<Menu>** to continue.

** Is displayed next to the time and date (on screen) to indicate that the keyboard is controlling the dome menu.*

**** SET UP MENU ****

PRESET **1*** 

MAP 

HOME POSITION 1

SELF RETURN OFF

AUTO MODE OFF

AUTO PAN KEY AUTO PAN


DIGITAL FLIP ON

LOCAL/REMOTE LOCAL

SPECIAL1 

CAMERA 

RS485 SET UP 

With the cursor highlighting the **PRESET 1***  select the Preset you want to store by using the Joystick (**<,>**). The * mark means the position number is preset.

Press **<Enter>** to select the preset.

Now the screen changes to..

PRESET NO. 2

POSITION SET 

PRESET ID ON 

ALC/MANUAL MANUAL 

DWELL TIME 3S

SCENE FILE OFF

PRESET SPEED|

L H

RET **DEL**

Use the Joystick (**<,>,<up>,<down>**) to move the cursor to **DEL** and press **<Enter>** to delete the preset.

Learning the PATROL

Enter the Panasonic's Menu. By the **<* command>** key.

Goto **SPECIAL1**  using the joystick (←,↑,↓,→).

Press the **<Enter>** key.

Change menu item to PATROL **LEARN**

Press and hold the **<* Command>** button to exit from the menu.

You will now have **LEARNING** in the middle of the screen.

The dome is now learning the PATROL use the joystick (←,↑,↓,→) and **<Zoom +>**, **<Zoom ->**.

To finish the PATROL either wait until **LEARNING** disappears from the screen or go back into the Panasonic's Menu.

Press the **<* Command>** button. A key assistance box appears which says which keys are used to navigate the following dome menu, press **<Menu>** to continue.

* See Panasonic manual for further Information on PATROL *

This is recalled by pressing the **<Patrol>** key.

Setting the Auto Pan

Enter the Panasonic's Menu. By the **<* command>** key.

Goto **AUTO MODE** **AUTO PAN**  using the joystick (←,↑,↓,→).

Press the **<Enter>** key.

You will see different screen.

** AUTO PAN **

POSITION	START
	END
SPEED	...I.....
	L H
PAN LIMIT	OFF
ENDLESS	OFF
DWELL TIME	2S

RET

Use the Joystick (←,↑,↓,→) move the cursor to **POSITION**

Press the **<Enter>** key to select **START**. Pan the camera to the start of the Autopan using joystick (←, →). Press **<Enter>** to mark the start of the Autopan, the cursor will move over to **END**. Pan the camera to the end of the Autopan using joystick (←, →). Press **<Enter>** to mark the end of the Autopan.

Autopan is now setup, use **<* command>** to exit the menu.

* When in this menu panning the camera the movement will be slow *

This is recalled by pressing the **<autopan>** key. This must be set via the Panasonic menu.

Assigning keys to operate relay outputs (CNT-CLS 1-2)

It is possible to assign the **<Wash>**, **<Wipe>** or **<Lamps>** keys to operate different Relay outputs on the Alarm Output connector.

Default Settings.

<i>DM Key</i>	<i>Panasonic function</i>
<Lamps> , latching ON/OFF	Not assigned
<Wash> , momentary close	Close Aux 1 output
<Wiper> , latching ON/OFF	Close Aux 2 output

Enter the Domes menu press the **<* Command>** button. A key assistance box appears which says which keys are used to navigate the following dome menu, press **<Menu>** to continue.

To assign a keyboard button to a Relay output press the **<CAM 1>** key then press the key you want to assign to Aux. 1 output. E.g. Press **<CAM 1>** then **<Lamps>** . This will assign the **<Lamps>** button to operate the Panasonic's Relay Output 1.

Repeat the same process as above but use the **<CAM 2>** to assign the key to Panasonic Relay Output 2.

Once the keys have been assigned exit the dome menu by holding down the **<* command>** button.

Sensomatic SpeedDome Camera Dome

This has its own Dome menu that can be accessed by the DS with Application software 2.0 (015) or above.

Dome features via DS/DSL:

Variable P/T/Z

Full menu operation.

50 presets.

Presets 1 - 7 Programmable in Menu and DS. Presets 8 - 50 programmable by DS.

RS422 2 wire Control

3 Programmable patterns.

1 Spiral pattern.

Dome Connection

Connection from the Digital Sprite is from the Serial 9 way D- type Female to the Sensomatic Mounting Base IO Board.

See Sensomatic Installation and service guide for more information.

Digital Sprite - 9 Way D-Type Female	Sensomatic RS422 Data Port		
Pin 1 Data A +	P1 Pin 1	RS422 Data In High (+)	Connected Together
	P1 Pin 3	RS422 Data Out High (+)	
Pin 9 Data B -	P1 Pin 2	RS422 Data In Low (-)	Connected Together
	P1 Pin 4	RS422 Data Out Low (-)	

After the dome has powered up the screen will say 'CHECKING NETWORK TYPE' move the DS joystick (←,↑,↓,→) then you will have control.

Accessing the dome menu

In order to access the domes Menu using the DS press the **<* Command>** button. A key assistance box appears which says which keys are used to navigate the following dome menu, press **<Menu>** to continue.

** Is displayed next to the time and date (on screen) to indicate that the keyboard is controlling the dome menu.*

To navigate around the domes menu use the DS keyboards joystick (↑, ↓) to move the highlight bar from Line to Line.

Press the **<focus far>** key to select a menu item.

Press the **<Zoom +>**, **<Zoom ->** key to change a setting.

To exit out of the Domes menu Press and hold down the **<* Command>** button to switch dome menu control off (* disappears).

To save a setting within the Menu select **EXIT AND SAVE CHANGES** then press **<focus far>** to select menu item. The domes menu will disappear from the screen but * will still be at the bottom of the screen. Press and hold down the **<* Command>** button to switch dome menu control off (* disappears).

To quit without saving in the Menu select **QUIT WITHOUT SAVING** then press **<focus far>** to select menu item. The domes menu will disappear from the screen but * will still be at the bottom of the screen. Press and hold down the **<* Command>** button to switch dome menu control off (* disappears).

Dome Menu

DOMES CONFIGURATION MENU

PAN/TILT/ZOOM
CAMERA / LENS FUNCTIONS
ALARMS / AREAS / HOME / PZ
ON-SCREEN TEXT DISPLAY
LANGUAGE PASSWORD

RESET TO FACTORY SETTINGS
QUIT WITHOUT SAVING

EXIT AND SAVE CHANGES

Direct Key Presses:

<i>Sensormatic Key/Function</i>	<i>Digital Sprite Keyboard press</i>
Starting the Dome Configuration Utility (Enter Dome Setup)	Press <*Command> then Press <Menu>
Exit Dome Menu	Press and hold <*Command>
Enter Setting / Open a submenu (Enter)	<focus far>
Move the Cursor	Joystick (↑,↓)
Select a parameter	<Zoom+> , <Zoom ->
Focus near	<focus near>
Focus far	<focus far>
Zoom in	<Zoom +>
Zoom out	<Zoom ->
Spiral pattern	<auto-pan> , Cancelled by joystick (←,↑,↓,→)
Patterns 1 - 3 / Patrols	<patrol> , recalls the 3 Patterns. 1 st press recalls Pattern 1, 2 nd press recalls Pattern 2, 3 rd press recalls Pattern 3, 4 th press cancels pattern
Iris Open	Press <Zoom +> and <Zoom -> together, then <Zoom +> . Press <Zoom +> and <Zoom -> together to return to normal Zoom operation.
Iris Close	Press <Zoom +> and <Zoom -> together, then <Zoom -> . Press <Zoom +> and <Zoom -> together to return to normal Zoom operation.

Presets

Recall Presets by pressing the **<Preset>** button. Once a box appears on screen that displays:
Goto Preset. Enter Preset number.

Type in the Preset number by using cameras 1 - 10. Camera 10 being 0.

Save Presets by pressing and holding the **<Preset>** button. Once a box appears on screen that displays:

Save Preset. Enter Preset number.

Type in the Preset number by using cameras 1 - 10. Camera 10 being 0.

It isn't possible to Cancel Presets on the Sensormatic dome.

*** * IMPORTANT INFORMATION ON PRESETS * ***

When storing presets numbers 1 - 7 these are assessable via the *Goto Preset* button on the Digital Sprite Keyboard and via the Sensormatic Menu.

It is possible to save Presets 8 - 96 via the Sensormatic Menu but using the *Goto Preset* button on the Digital Sprite will NOT recall them. These can only be recalled by using functions in the domes menu.

If you Save Presets 1 - 50 via the *Digital Sprite* keyboard these can be recalled by the Digital Sprite keyboard, but note that presets 8 - 50 are NOT the same as the presets stored in the Sensormatic Menu.

Commands obtained directly by using the Preset command.

Recall Preset by pressing the goto **<Preset>** button. Once a box appears on screen that displays
Goto Preset. Enter Preset number.

Type in the Preset number by using cameras 1 - 10. Camera 10 being 0.

Preset Number	Function
90	Delete pattern 1
91	Delete pattern 2
92	Delete pattern 3

Programming Patterns

Access the domes Menu using the DS press the **<* Command>** button. A key assistance box appears which says which keys are used to navigate the following dome menu, press **<Menu>** to continue.

** Is displayed next to the time and date (on screen) to indicate that the keyboard is controlling the dome menu.*

Once the Sensormatic menu is displayed on screen use the Joystick (↑,↓) to highlight

QUIT WITHOUT SAVING press **<focus far>** to select.

Then screen displays DATA NOT SAVED QUIT ANYWAY? **NO**

Use the **<zoom +>** key to select **YES** then press **<focus far>** to enter.

The screen will be cleared, but * will be displayed next to the time and date.

Press the **<patrol>** key and then either **<CAM 1>**, **<CAM 2>** or **<CAM 3>** relating the pattern number.

A timer will appear on screen for the chosen pattern. All movements (←,↑,↓,→) will be recorded.

To end the timer press the **<patrol>** key.

To preview the pattern press the **<autopan>** key.

If you wish to save the pattern press **<enter>**.

To exit the pattern learning mode press and hold the **<* command>** key (* disappears).

Pelco Spectra II SD5 Dome

This has its own Dome menu that can be accessed by the DS with Application software 2.0 (021) or above.

Dome features via DS:

Variable P/T/Z

Full menu operation.

64 presets.

RS422 2 wire Control

Random Scan

Auto Scan

Frame Scan

Dome Connection

Connection from the Digital Sprite is from the Serial 9 way D- type Female to the Pelco Mounting Base Board.

Must be set for Pelco 'P' protocol and 9600 Baud.

See Pelco Installation guide for more information.

Digital Sprite - 9 Way D-Type Female	Pelco RS422 Data Port
Pin 1 Data A +	Control Rx +
Pin 9 Data B -	Control Rx -
Not connected	Control Tx +
Not connected	Control Tx -

SW-1 Protocol Selection DIP switches								
"P" Version	On	Off	Off	Off	Off	Off	Off	Off
Dip Switch	1	2	3	4	5	6	7	8

SW-2 Address DIP switches							
"P" Version							
Rx Address = Switch Value plus 1							
Dip Switch	1	2	3	4	5		
RX Address 1	Off	Off	Off	Off	Off		
RX Address 16	On	On	On	On	Off		
Switch Value	1	2	4	8	16		
Dip Switch					6	7	8
9600 Baud					Off	On	Off

Once the dome has been powered up the screen will say.

PELCO SPECT II 3.31
CONFIGURE DOME

Protocol P
Address 1
Comm 9600,N,8,1

Accessing the dome menu

In order to access the domes Menu using the DS press the **<* Command>** button. A key assistance box appears which says which keys are used to navigate the following dome menu, press **<Menu>** to continue.

** Is displayed next to the time and date (on screen) to indicate that the keyboard is controlling the dome menu.*

To navigate around the domes menu use the DS keyboards joystick (↑, ↓) to move the Cursor □ from Line to Line.

Press the **<Zoom +>** key to select a menu item.

Press the **<Zoom ->** key to cancel.

To exit out of the Domes menu Select EXIT in the menu and press **<Zoom +>** (Enter).

The domes menu will disappear from the screen but * will still be at the bottom of the screen.

Press and hold down the **<* Command>** button to switch dome menu control off

(* disappears).

Domes Menu

□<Camera>
<Line Sync>
<Power Up Mode>
<Aux>
<Alarms, Zone Blank>
Exit

The □ symbol is the cursor.

Direct Key Presses:

<i>Pelco Key/Function</i>	<i>Digital Sprite Keyboard press</i>
Access Main Menu (Enter Dome Setup)	Press <*Command> then Press <Menu>
Exit Dome Menu	Select EXIT in menu, then press and hold <* command>
Enter Setting / Open a submenu (Enter)	<Zoom +>
Move the Cursor	Joystick (↑,↓)
Select a parameter	Joystick (↑,↓)
Focus near	<focus near>
Focus far	<focus far>
Zoom in	<Zoom +>
Zoom out	<Zoom ->
Auto Scan	<auto-pan> , Cancelled by joystick (←,↑,↓,→)
Patrol / Pattern	<patrol> , Recalls the saved Programmed Pattern. Cancelled by joystick (←,↑,↓,→)
Iris Open	Press <Zoom +> and <Zoom -> together, then <Zoom +> . Press <Zoom +> and <Zoom -> together to return to normal Zoom operation.
Iris Close	Press <Zoom +> and <Zoom -> together, then <Zoom -> . Press <Zoom +> and <Zoom -> together to return to normal Zoom operation.
Close Relay Output 0	<wash> momentary close
Close Relay Output 1	<wipe> latching ON/OFF
Close Relay Output 2	<lamp> latching ON/OFF

Presets

Recall Presets by pressing the **<Preset>** button. Once a box appears on screen that displays:
Goto Preset. Enter Preset number.

Type in the Preset number by using cameras 1 - 10. Camera 10 being 0.

Save Presets by pressing and holding the **<Preset>** button. Once a box appears on screen that displays:

Save Preset. Enter Preset number.

Type in the Preset number by using cameras 1 - 10. Camera 10 being 0.

Cancel Presets by double pressing the **<Preset>** button. Once a box appears on screen that displays:

Clear Preset. Enter Preset number.

Type in the Preset number by using cameras 1 - 10. Camera 10 being 0.

Pelco Commands obtained directly by using the Preset command.

Refer to the Pelco operating instructions for more details.

Preset Number	Function
1	Park
1 - 7	Alarms Presets, If used
8 - 32	Normal Preset Positions
33	'Flip' (Pan dome drive 180°)
34	'Pan Zero' (Factory set zero reference point)
35 - 66	Normal Preset Positions
Save Preset 90 - 91	Set Manual limit stops
Clear Preset 90 - 91	Clear Manual limit stops
Save Preset 92 - 93	Scan limit Stops
Clear Preset 92 - 93	Clear Scan limit Stops
94	Remote Reset ?
Save Preset 95	Select Camera programming menu
96	Stop a Scan
97	Random Scanning
98	Frame Scanning
99	Start Auto Scanning

Programming Zones / Sector

Access the domes Menu using the DS press the **<* Command>** button. A key assistance box appears which says which keys are used to navigate the following dome menu, press **<Menu>** to continue.

** Is displayed next to the time and date (on screen) to indicate that the keyboard is controlling the dome menu.*

Once the Pelco menu is displayed on screen use the Joystick (↑,↓) to move the cursor □ to EXIT press **<zoom +>** to select.

The screen will be cleared, but * will be displayed next to the time and date.

Press **<CAM 1>** to **<CAM 8>** to establish the Zone to be set eg. **<CAM 1>** is zone 1, **<CAM 4>** is zone 4 etc.

Position the camera to the left of the scene to set then press **<autopan>**, now move the camera to the right of the scene and press the **<autopan>** again, this will now have set up the sector. Repeat this process for the other Zones.

To exit the programming mode press and hold the **<* command>** key.

To delete a Zone/Sector

Access the domes Menu using the DS press the **<* Command>** button. A key assistance box appears which says which keys are used to navigate the following dome menu, press **<Menu>** to continue.

** Is displayed next to the time and date (on screen) to indicate that the keyboard is controlling the dome menu.*

Once the Pelco menu is displayed on screen use the Joystick (↑,↓) to move the cursor □ to EXIT press **<zoom +>** to select.

The screen will be cleared, but * will be displayed next to the time and date.

Press **<CAM 1>** to **<CAM 8>** to establish the Zone to be deleted eg. **<CAM 1>** is zone 1, **<CAM 4>** is zone 4 etc.

Position the camera to the left of the scene to set then press **<autopan>**, but avoid pressing the **<autopan>** again to set the right, this will have deleted the sector.

To exit the programming mode press and hold the **<* command>** key.

To learn the Patrol / Pattern mode

Access the domes Menu using the DS press the **<* Command>** button. A key assistance box appears which says which keys are used to navigate the following dome menu, press **<Menu>** to continue.

** Is displayed next to the time and date (on screen) to indicate that the keyboard is controlling the dome menu.*

Once the Pelco menu is displayed on screen use the Joystick (↑,↓) to move the cursor □ to EXIT press **<zoom +>** to select.

The screen will be cleared, but * will be displayed next to the time and date.

Press the **<patrol>** key.

On screen will display PROGRAMMING PATTERN. All movements will be recorded (←,↑,↓,→).

Press the **<patrol>** key again to stop the programming.

To exit the patrol learning mode press and hold the **<* command>** key (* disappears).

Setting the Zoom and Focus Speeds.

There are 4 speeds available for Zoom and Focus, 0 to 3

Setting the Zoom speed.

Press the **<focus near>**, **<focus far>** keys together.

To set the Zoom speed move the joystick (← or →), full pan position will set speed 3, joystick at rest will set 0.

Press the **<focus near>**, **<focus far>** keys together, to store the settings.

Setting the Focus speed.

Press the **<focus near>**, **<focus far>** keys together.

To set the Zoom speed move the joystick (↑ or ↓), full tilt position will set speed 3, joystick at rest will set 0.

Press the **<focus near>**, **<focus far>** keys together, to store the settings.

Appendix

Obtaining the DS/DSL Telemetry Drivers Versions

First Select the *Serial Telemetry Type* in the *System Options* menu page. Change this to the type you are using e.g. JVC, Ultrak, VCL etc. Move the cursor to *Serial Telemetry Type* and wait 20 seconds, the version number should then be displayed.